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## EX PARTE OR LATE FILED

**ORIGINAL** 

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LUSWEST

May 10, 2000

**EX PARTE** 

Ms. Magalie Roman Salas Secretary Federal Communications Commission 445 - 12<sup>th</sup> Street, SW, TW-A325 Washington, DC 20554 MAY 1 0 2000

MERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re:

In the Matter of U S WEST Telephone Companies' Continuing

Property Records Audit

CC Docket No. 99-117, ASD File No. 99-22

Ms. Roman Salas:

The attached letter from Ann Thornton, National Director, Data Quality and Integrity Services, Deloitte & Touche LLP, addressing issues raised in the Accounting Safeguards Division's Continuing Property Records ("CPR") audits was contained in U S WEST's Reply Comments in CC Docket No. 98-137. Please include this letter in the record of the CPR Notice of Inquiry.

In accordance with Section 1.1206(b)(1) of the Commission's rules, an original and one copy of this letter and attachment are being filed with your office for inclusion in the public record of this proceeding. Acknowledgment and date of receipt of this submission are requested. A duplicate of this letter is attached for this purpose.

Respectfully,

cc:

James T. Harron James T. Hannon (RW)

> Kenneth Moran Andrew Mulitz

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Reply Comments of U S WEST Communications, Inc., CC Docket No. 98-137, CC Docket No. 99-117, AAD File No. 98-26, filed Apr. 28, 2000.

See In the Matters of: Ameritech Corporation Telephone Operating Companies' Continuing Property Records Audit; Bell Atlantic (North) Telephone Companies' Continuing Property Records Audit; Bell Atlantic (South) Telephone Companies' Continuing Property Records Audit; Pacific Bell and Nevada Bell Telephone Companies' Continuing Property Records Audit; Southwestern Bell Telephone Company's Continuing Property Records Audit; U S WEST Telephone Companies' Continuing Property Records Audit, Notice Of Inquiry, 14 FCC Rcd. 7019 (1999).



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March 28, 2000

Mr. Mark Link
Executive Director – Corporate Accounting
US WEST Communications, Inc.
1801 California Street
Denver, CO 80202

Dear Mr. Link:

Deloitte & Touche LLP was asked by US West, Inc. to read and provide comments related to sampling methodologies and issues as described in several documents:

- 1. the draft FCC report, "Audit of Continuing Property Records of US West as of June 30, 1997; Report of Audit Findings" (the "August FCC Report")
- 2. the December 22, 1998 draft of the "Audit of Continuing Property Records of US West as of June 30, 1997; Report of Audit Findings" (the "December FCC Report").
- 3. Affidavit of Robert M. Bell, PhD, filed September 23, 1999
- 4. Affidavit of James K. Loebbecke, CPA, filed September 23, 1999
- 5. Comments of AT&T Corp, filed September 23, 1999
- 6. MCI Worldcom Comments, filed September 23, 1999
- 7. Letter of William Kennard to Congressmen Tanzin and Dingell dated February 24, 1999
- 8. A revised draft of the FCC report, released on October 22, 1999 pursuant to Public Notice DA 99-2282 (the "October 1999 FCC Report")

We provided US West with a letter dated August, 18, 1998 containing our comments on the "August FCC Report" (document 1), a letter dated January 8, 1999 containing our comments on the "December FCC Report" (document 2), a letter dated October 25, 1999 containing our comments on documents 3-7, and a letter dated November 1, 1999 containing our comments on the "October 1999 FCC Report" (document 8). A copy of those letters is attached hereto.



You have now asked us to read several other documents and provide comments on whether the concerns raised in our letters of August 18, 1998 and of January 8, 1999 (which included several concerns that could affect the validity of the estimates) have been adequately addressed. The documents you have provided to us for this purpose are as follows:

- Reply Affidavit of Robert M. Bell, PhD, filed October 25, 1999
- Reply Affidavit of James K. Loebbecke, CPA, filed October 25, 1999
- Reply Comments of AT&T Corp, filed October 25, 1999
- MCI Worldcom Reply Comments, filed October 25, 1999

Overall, these documents either do not address or do not adequately address our observations from previous letters. See Attachment 1 for a detailed table which lists the status of 17 observations made in our prior letters. Observations #1-12 have not been adequately addressed since they were last raised in our letter of October 25, 1999. In fact, the discussion of statistical issues in the most recent documents does not appear to differ significantly from the discussions in documents #3-6 (referenced above). Observations #13-17, which were first raised in our letter of November 1, 1999, do not appear to have been addressed at all.

We have noted one aspect of the reply comments and affidavits that we should respond to: Mr. Bell has cited various statistical references to support his contention that "point estimates are designed to provide the best approximation of the true value" (Bell, p.11). As we have stated before (see Observation #9 in our letter of October 25, 1999), we believe that Mr. Bell places too much emphasis on the point estimate without appropriately considering the corresponding confidence interval and precision. We have therefore provided additional arguments and statistical citations in Attachment 1 to support our position, that a point estimate is not meaningful unless it is accompanied by a confidence interval.

The size of a confidence interval is important, because it provides a measurement of the uncertainty around a point estimate. In our view (and that view has been supported by Wonnacott and Loebbecke, cited below), it is not appropriate to ignore the size of the confidence interval, as Mr. Bell does, and instead emphasize the point estimate as the "best approximation of the true value" of the population. If a confidence interval is very large in relation to an estimate, it may indicate that it is impractical to use the estimate to draw conclusions about a population. For example, the total size of the confidence interval calculated by the ASD is currently \$484.8 million, which appears large compared to the current point estimate of \$505.8 million. One can never be reasonably confident that a point estimate is correct, because the probability that the point estimate exactly equals the true population value approaches zero. Therefore, it is important to look at the entire confidence interval when performing a statistical extrapolation.

In summary, neither Mr. Bell's reply affidavit nor any of the other reply documents referenced above adequately respond to observations made in our letters of August 18, 1998, January 8, 1999, October 25, 1999, and November 1, 1999. In addition, we continue to have concerns that the approach taken by the ASD may result in invalid sampling estimates. We reiterate that, even if the estimate is in fact valid, the size of the precision range, because it is so large in relation to the estimate, creates doubt as to the practicality of using the range for concluding as to the actual amount of error in the population.

Yours truly, by Thomber

Ann Thornton, Director

National Director, Data Quality and Integrity Services

## **ATTACHMENT #1**

Observation	Brief Description of D&T's Earlier Observation	D&T Comment on Most Recent Documents
1	Criteria used on excluding over 500 offices from population was not explained.	No further explanation provided.  We reiterate our October 1999 concern.
2	The process used to replace certain original sample selections was not documented.	No further explanation provided.  We reiterate our October 1999 concern.
3	The rationale for using a high number of strata, with relatively few selections per strata was not documented.	No acknowledgement of observation or any response thereto.  We reiterate our October 1999 concern.
4	The explanation of sample design did not address the choice of the number of offices and the stratification of offices.	No further explanation provided.  We reiterate our October 1999 concern.
5	Random selection based on units was used, rather than dollar-based sampling, which is more typically used when evaluating the value of accounting populations, especially populations in which the value of individual items varies widely.	No further explanation provided.  We reiterate our October 1999 concern.
6	The precision range was very large, reducing the predictive value of the estimate of error in the population.	No acknowledgement of observation or any response thereto.  We reiterate our October 1999

Observation	Brief Description of D&T's Earlier Observation	D&T Comment on Most Recent Documents
		concern.
7	There was not any reference to sampling guidelines for precision.	No acknowledgement of observation or any response thereto.
		We reiterate our October 1999 concern.
8	Documentation was not provided for why mean-per-unit estimators were used, instead of ratio estimators (mean-per-unit	No further explanation provided.  We reiterate our October 1999
	estimators usually result in a larger precision range)	concern.
9	Sampling theory does not support the assertion that the actual cost of missing plant lies closer to the mid-point of the range.	Mr. Bell and AT&T inappropriately emphasize the importance of the point estimate, which is contrary to cited statistical literature (see below).
		We reiterate our concern.
10	Accounting standards do not support using the high end of a range of error, when all points in the range are equally	FCC Comment removed prior to January 8, 1999 letter.
	likely of being the actual error.	Response resolved our comment.
11	Understatement errors were not considered as an offset to the findings that the population may be overstated.	Understatement errors still are not offset against the FCC's estimate of overstatement errors.
12	No references, formulas, or descriptions of the precise Bayesian approach used were provided.	No acknowledgement of observation or any response thereto.
13	The FCC failed to document in sufficient detail the nature of the mistake that was made.	No acknowledgement of observation or any response thereto.

Observation	Brief Description of D&T's Earlier Observation	D&T Comment on Most Recent Documents
14	Even though the number of CPR errors reported did not change, the estimate of the percentage error rate decreased while the estimate of the dollars of error increased significantly.	No acknowledgement of observation or any response thereto.
15	The size of and delay in reporting the "correction" casts doubts on the adequacy of the quality assurance process associated with the FCC audit reports.	No acknowledgement of observation or any response thereto.
16	Bayesian analysis does not reliably corroborate the FCC's findings, given that the Bayesian analysis was also used to "corroborate" the FCC's prior findings.	No acknowledgement of observation or any response thereto.
17	The FCC implies that US West should have and could have recalculated the statistical calculations in the report. We disagree.	No acknowledgement of observation or any response thereto.

## Additional detail behind Observation #9:

Mr. Bell has cited various statistical references to support his contention that "point estimates are designed to provide the best approximation of the true value" (Bell, p.11). We do not believe that either Mr. Bell's cited references nor statistical theory provide adequate support for his assertion. As we have stated before (see Observation #9 in our letter of October 25, 1999), we believe that Mr. Bell inappropriately emphasizes the point estimate without considering the corresponding confidence interval and precision.

We referred to at least one edition of every book cited in footnote 12 of Bell's reply affidavit (citations to Wonnacott, Hogg and Craig, and Mood are made in footnote 12 of Bell, p. 11), and we have been unable to find support for emphasizing the point estimate while ignoring the size of the corresponding confidence interval. It is difficult to evaluate the precise relevance

of the sources which he cites to support his argument, because each of his citations spans many pages (he cites more than 90 pages of Mood, more than 30 pages of Craig, and more than 20 pages of Wonnacott).

Moreover, Mr. Bell's reply neither addresses nor refutes the following passage from Loebbecke, which we first cited in our October 25, 1999 letter: "the sample mean has no greater chance of exactly equaling the true but unknown population mean than has any other value in the confidence interval" (Loebbecke, Applications of Statistical Sampling to Auditing, p. 115).

Mr. Bell has also not addressed the following passage from Wonnacott, which also supports our position: "Accordingly, if we want to be <u>reasonably confident</u> that our inference is correct, we cannot claim that [the population mean] is precisely equal to the observed [sample mean]. Instead, we must construct an interval estimate or confidence interval..." [emphasis added, the term "population mean" is substituted for the Greek letter Mu and the term "sample mean" is substituted for the term X-bar] (Wonnacott, *Introductory Statistics for Business and Economics*, 3<sup>rd</sup> edition, p. 220).

In our view (and that view has been supported by Wonnacott and Loebbecke, cited above), it is not appropriate to ignore the size of the confidence interval and instead emphasize the point estimate as the "best approximation of the true value" of the population (Bell, p. 11). In practical applications of statistics, it is very important to be "reasonably confident" (to use Wonnacott's term) that the inference drawn is correct. One can never be reasonably confident that a point estimate is correct, because the probability that the point estimate exactly equals the true population value approaches zero. Therefore, it is important to look at the entire confidence interval when performing a statistical extrapolation.